Teaching Hospital, Dundee were recruited prospectively over a 2-month period. Patients with dementia (AMT < 8), visual impairment were excluded. 59 patients recruited in loop-1 were given Likert scale questionnaires assessing knowledge of the hip fracture, treatments and complications. 64 patients recruited in loop-2 were given new information leaflets and completed the same questionnaire. Scores per question and total scores were assessed. Statistically significant improvement ($p < 0.0001$) was observed in understanding injury, treatment options, complications and prognosis. Total score improved from 11.7 to 18.5 ($p < 0.0\ 001$).
**Conclusion**: We observed significant benefit to patients' understanding of hip fracture with new leaflet provision in addition to existing modalities. Further study to elucidate optimal information content and delivery is required.

### 0917: PREDICTORS OF OUTCOMES OF ARTHROSCOPIC ROTATOR CUFF REPAIR: A PILOT STUDY

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**Aim**: To analyse retrospective data on arthroscopic rotator cuff repair over a 3 year period to correlate patient, injury or repair specific factors with post-operative functional outcome scores.
**Methods**: Data was collected retrospectively for all arthroscopic rotator cuff repairs performed by the senior surgeons between 2010 and 2013 at two sites ($n = 375$). Outcome scores collected via questionnaires were: Oxford Shoulder Score, Constant-Murley Shoulder Score, Quick DASH score as well as patient satisfaction ratings and pain scores on a visual analogue scale. These were correlated with 12 patient, injury or repair specific factors using SPSS 20.0 for Windows.
**Results**: Of the 375 patients, only 43 responded within the timeframe of this pilot study and were used for analysis. Overall, arthroscopic cuff repair was found to be beneficial in terms of all outcome scores. Factors found to significantly affect outcome scores were: gender, fatty degeneration of the cuff, tendon retraction, transverse tear width and tentatively, the number of bone anchors used during repair.
**Conclusion**: The numbers used in this pilot study are not sufficient to provide solid conclusions, but we found significant correlations for gender, tear width, tendon retraction, fatty degeneration and potentially bone anchor use. These correlations warrant further study.

### 0922: AN AUDIT OF THE DIAGNOSIS AND MANAGEMENT OF SEPTIC ARTHRITIS IN ADULTS IN THREE GLASGOW TEACHING HOSPITALS

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**Aim**: To evaluate how the diagnosis and management of septic arthritis (native and prosthetic) in three Glasgow teaching hospitals correlated with published evidence based guidelines.
**Methods**: We extracted and analysed 12 months of positive joint aspirate data from our laboratory system. Electronic records and case notes were reviewed for compliance, using the standards defined in the published guidance. Audit was performed using the Royal College of Pathologists template. Compliance was defined as 100% of the standards being achieved, or documentation explaining variance.
**Results**: 57 patients were identified as having culture positive bacterial septic arthritis. 86 samples were received in total from 58 affected joints. Of these 63.8% were native joints and 36.2% were prosthetic. A single bacterial pathogen was isolated in 87.7% of patients, with polymicrobial infection being identified in 12.2%. Staph aureus (MSSA) was the most common pathogen.
**Conclusion**: This audit highlighted significant variation across the range of standards when compared with evidence-based guidelines. Overall only 3 standards were achieved in over 90% of case. Importantly empirical therapy was appropriate in over 90% of cases. Alteration of antibiotic therapy according to gram stain and culture results was also appropriate in over 90% of cases.

### 0940: ASSESSING THE DOCUMENTED CLINICAL EVALUATION OF INTRA-OPERATIVE ORTHOPAEDIC FLUOROSCOPY IMAGING IN ACCORDANCE WITH IONISING RADIATION (MEDICAL EXPOSURE) REGULATIONS

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**Aim**: Ionising Radiation (Medical Exposure) Regulations 2000 (IR(ME)R) were established to minimise dangers of radiation exposure through medical investigations.
IR(ME)R specifies "a clinical evaluation of the outcome of each medical exposure must be recorded". This includes orthopaedic fluoroscopic screening, with hospital policies including written agreements transferring evaluating responsibility to the operating team. Use of fluoroscopy without a documented evaluation would be unlawful. This audit assesses whether this responsibility is addressed in our unit.
**Methods**: Retrospective review of orthopaedic operative notes who received intra-operative fluoroscopic imaging at the Bristol Royal Infirmary over a four week period. A 100% compliance standard was set.
**Results**: 109 orthopaedic operations were carried out during the sample period. 51 cases used fluoroscopic imaging. 39% of operation notes did not include a documented evaluation of the images obtained, with 27% of these being composed by surgical trainees.
**Conclusion**: A significant number of fluoroscopy procedures lacked a documented evaluation by trainees. Subsequently, post-op imaging is potentially being repeated, increasing patient radiation exposure with potential health and legislation implications. We aim to re-audit the benefit of significantly improving this practice through education awareness of IR(ME)R to surgical trainees and introduction of an operative-note proforma to prompt imaging evaluation.

### 0953: IS LOW ENERGY POLYTRAUMA A PREDICTOR FOR BLOOD TRANSFUSION IN THE ELDERLY? A CASE CONTROL STUDY

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**Aim**: Hip fractures and its operative management is associated with acute blood loss leading to acute anaemia, which has an increased strain on vital organs.
**Aim**: To assess whether there is an increased need for blood transfusion in elderly patients with multiple fragility fracture and its impact on their functional outcome.
**Methods**: We included 26 patients (Group A) who had a fragility fractures alongside a hip fracture, over a period of three years. As a control group we randomly selected, 26 patients (Group B) with an isolated hip fracture. Both groups were treated surgically for the hip fracture. The need for blood transfusion and functional outcome was assessed and compared.
**Results**: The preoperative haemoglobin was less than 110 g/L in 20% of patients in Group A compared to 24% in Group B, with a greater mean postoperative drop in the haemoglobin level in the former group and subsequently a greater need for transfusions (OR 2.61). The one month mortality was better in Group A, with better functional outcome in those who received blood transfusion in Group A.
**Conclusion**: Elderly patients have a reduced functional reserve hence require more transfusions and this has a positive impact on the functional outcome.

### 0974: BEST PRACTICE TARIFF FOR FRACTURED NECK OF FEMUR: A COMPLETED AUDIT FROM A BUSY DISTRICT GENERAL HOSPITAL

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**Aim**: To evaluate the department's compliance with best pratice criteria set out by the Department of Health and submitted to the National Hip Fracture Database. This was re-audited after NOF pathway was updated.
**Methods**: A retrospective audit of all patients treated for a fractured neck of femur between April–September 2013, and re-audit from December 2013–April 2014 after changes were made.
**Results**: 187 and 113 patients in first and second loops respectively. Mean age 85.2 (83.5) ($p = 0.178$). Median ASA unchanged at 3 ($p = 0.170$). Significant increase in patients meeting all criteria 64.6% (37.4%)

($p < 0.001$). Significant reduction in lost payments for these patients £54,735 (£156,159) across respective periods. Inpatient mortality unchanged 11.5% (11.75%).
**Conclusion**: This audit shows that by targeting specific areas of practice, this can lead to significant financial gains for the treatment of this cohort of patients to help fund additional services. Achieving further improvement would necessitate further investment in services e.g. Orthogeriatric cover over Bank Holidays. To justify this, further evaluation would be needed into associated healthcare costs. Unfortunately targeting these areas alone did not show any reduction in 30 day mortality. Further evaluation is needed to assess associated morbidity and mortality in these patients to allow potential reduction.

### 0992: WHAT HAS BEEN THE ROLE FOR MRI SCANNING OF THE KNEE IN PRIMARY CARE?

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**Aim**: To assess the compliance of the existing GP radiology protocol in patients over 40.
Older patients present to the GP with symptoms of osteoarthritis, for which radiographs aid the diagnosis.
There is concern over the number of Magnetic Resonance Imaging (MRI) scan requests from Primary Care in this patient group.
The current GP radiology protocol for knee pain is antero-posterior WB, lateral and skyline radiographs. An MRI can be considered if the diagnosis is in doubt.
**Methods**: Between March–May 2012, 390 GP requested MRI scans were performed at Wirral University Teaching Hospital. The MRI results were reviewed and of those referred to orthopaedics, a review of the clinic letter took place to assess the outcome.
**Results**: 117/390 patients referred to our orthopaedic unit following their MRI scan.
89/117 patients were >40 years. 20/89 of these patients had protocol compliant radiographs.
59/89 (66%) MRI scans were normal or showed osteoarthritis.
117 clinic letters were reviewed by the 2 senior authors. In 51/117 cases an MRI scan was deemed appropriate.
**Conclusion**: Our study shows that MRI scans are used as a diagnostic tool. Over 50% of MRI scans are thought to be performed inappropriately (66/117). This has financial implications.

## Posters: Paediatric Surgery

### 0176: VENOUS THROMBOEMBOLISM PROPHYLAXIS IN CHILDREN: THE SLOW WHEELS OF CHANGE

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**Aim**: Venous thromboembolism (VTE) in children is a rare but potentially catastrophic occurrence. Prevalence is 5.3 per 10,000 hospital admissions and increasing with rising childhood obesity. We evaluated the number of children at risk of VTE admitted to a paediatric surgery centre and audited compliance with VTE prophylaxis guidelines.
**Methods**: A prospective audit was undertaken (January–March 2014) with data gathered from notes and patients, with a re-audit (November 2014). Audit standards were set using British Committee for Standards in Haematology and local guidelines. Inclusion criteria were minimum overnight surgical admission and weight over 40 kg.
**Results**: 36 patients were identified initially. 61% ($n = 22$) had two or more risk factors for VTE. 100% required formal VTE risk assessment, 44% ($n = 16$) had evidence of assessment and 42% ($n = 15$) were prescribed VTE prophylaxis. Following intervention only 33% were assessed for prophylaxis.
**Conclusion**: As paediatric VTE is uncommon, prophylaxis consideration is often neglected. Less than half of at risk patients had their need assessed. Although initial data was presented, change failed to occur possibly due to staff changeover and time required to update guidelines and theatre checklists. This highlights the need for thorough departmental induction and more efficient protocol changes to improve patient safety.

### 0195: STREPTOCOCCUS MILLERI AND POST-APPENDICECTOMY ABSCESS

J. Lee*, D. Banerjee, R. England. *Norfolk and Norwich University Hospital, UK*

**Aim**: The importance of Streptococcus milleri with regard to abscess formation after appendicectomy in children remains unclear.
**Methods**: A retrospective data collection was performed using the hospital ICE system. All patients who underwent appendicectomy for appendicitis between November 2009 and October 2014 were identified. Patients less than 1 year, incidental and interval appendicectomy were excluded. Patient age, histology, swab results, ultrasound scan reports, hospital length of stay (HLOS) and readmission details were collected. Data from cultured patients were classified into three groups: Streptococcus milleri positive (SM); other organisms; and negative culture. Statistical comparisons were performed using Chi-square test and Z-score.
**Results**: A total of 444 patients were identified, from which 157 had a pus culture sent. SM patients (23%) were more likely to develop an abscess compared to other organisms (16.9%) ($rr = 1.36$, $p < 0.05$) and to develop advanced appendicitis, 73% SM group compared to 55% in other organisms. ($rr = 1.32$, $p < 0.01$). There was a longer HLOS stay of 6.9 days in SM patients vs 5.4 days in other species ($p < 0.05$).
**Conclusion**: Streptococcus milleri was associated with an increased risk of advanced appendicitis, abscess formation and prolonged hospital stay, after appendicectomy compared to other organisms.

### 0200: OUTCOMES OF LAPAROSCOPIC VERSUS OPEN PYELOPLASTY IN CHILDREN

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**Aim**: Pelviureteric junction obstruction (PUJO) is the leading cause of antenatal hydronephrosis. Although its persistence into childhood may cause no problems, symptomatic disease presents as intermittent loin pain, vomiting and recurrent urinary tract infections. Primary prevention of disease encourages early intervention for PUJO to limit any decline in renal function. Over time, minimally invasive procedures have been encouraged and laparoscopic pyeloplasty has emerged in paediatric urology. Previously a thorough analysis of the success of laparoscopic pyeloplasty at Royal Manchester Children's Hospital had not been completed. An audit was therefore conducted to assess the complication rate of laparoscopic pyeloplasty and whether any predisposing factors to complications could be identified.
**Methods**: All consecutive patients aged 5 and above who underwent laparoscopic or open pyeloplasty during the period January 2006 to July 2013 were included. Patient demographics and operative details were recorded and analysed.
**Results**: Laparoscopic patients encountered a higher rate of post operative anastomotic leakage and long term persistent obstruction. Both approaches offered similar success rates of 92%. Laparoscopic pyeloplasty offered no definitive advantage over the traditional open approach.
**Conclusion**: Advances in training schemes, scrutiny of operative approach and thorough analysis of previozsus surgical errors will undoubtedly improve paediatric pyeloplasty outcomes.

### 0211: IS LAPAROSCOPIC CHOLECYSTECTOMY SAFE IN THE HANDS OF THE PAEDIATRIC SURGEON?

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**Aim**: One of the current controversies surrounding non-specialist paediatric surgery is whether paediatric laparoscopic cholecystectomy should be performed by an adult or a paediatric surgeon. The safety of this procedure performed by paediatric surgeons could be brought into question as the published data is often extrapolated from adult series.